This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.      (Currently Amended) A method of providing real-time decision support in the review of physiological data, the method comprising:

establishing a library of interpreted physiological data records;

gathering the physiological data;

interpreting the physiological data based on a predetermined set of criteria such that a separate interpretation is generated, wherein the interpreting step includes:

_____measuring the physiological data;

_____analyzing a set of characteristics associated with the physiological data;

_____extracting one or more patterns from the physiological data to generate the separate interpretation; and

_____comparing the separate interpretation from the physiological data to a set of known patterns from the library;

correlating the separate interpretation to one or more of the physiological data records in the library of physiological data records; and

displaying the separate interpretation and the correlated physiological data records on a display.


2.      (Original)  A method as claimed in claim 1, further comprising:

establishing a communications link to an expert location;

transmitting information concerning the interpretation to the expert location; and

displaying a communication from the expert location on the display.


3.      (Original) A method as claimed in claim 2, wherein transmitting information concerning the interpretation includes transmitting a text message.

4.      (Original) A method as claimed in claim 2, wherein transmitting information concerning the interpretation includes transmitting a voice message.

5.      (Canceled)

6.      (Previously Presented) A method as claimed in claim 1, further comprising determining whether the one or more extracted patterns match one or more patterns in the set of known patterns.

7.      (Previously Presented) A method as claimed in claim 1, further comprising:
        creating a library of education materials; and
        displaying a predetermined portion of the education materials on the display.

8.      (Original) A method as claimed in claim 1, further comprising displaying a message based on the interpretation on the display.

9.      (Original) A method as claimed in claim 1, further comprising displaying the physiological data on the display.

10.     (Previously Presented) A physiological data interpretation system comprising:
a library of physiological data records;
        a physiological data acquisition device capable of acquiring physiological data and coupled to the library of physiological data records, the acquisition device having an interpretation module to generate a separate interpretation of the physiological data and a correlation module to compare the separate interpretation to the records in the library of physiological records and determine a set of correlated data records, wherein the interpretation module is configured to measure the physiological data, analyze a set of characteristics associated with the physiological data, and extract one or more patterns from the physiological data to generate the separate interpretation; and

an output device coupled to the acquisition device.

11.    (Original) A system as claimed in claim 10, wherein the output device is a display.

12.    (Original) A system as claimed in claim 10, further comprising
an expert location coupled to the acquisition device.

13.    (Original) A system as claimed in claim 12, wherein the expert location is a portal.

14.    (Original) A system as claimed in claim 12, wherein the acquisition device includes an information filter.

15.    (Original) A system as claimed in claim 12, wherein the acquisition device includes a communications module capable of transmitting messages to and receiving messages from the expert location.

16.    (Original) A system as claimed in claim 15, wherein the messages include text information.

17.    (Original) A system as claimed in claim 15, wherein the messages include voice information.

18.    (Original) A system as claimed in claim 10, further comprising a server coupled to the acquisition device, and wherein the library of physiological records is located on the server.

19.    (Original) A system as claimed in claim 10, further comprising a library of supplemental materials coupled to the acquisition device.

20.    (Original) A system as claimed in claim 10, wherein the library of physiological data records includes ECG data.

21.    (Original) A system as claimed in claim 10, wherein the acquisition device is an ECG acquisition device.

22.    (Original) A system as claimed in claim 10, wherein the acquisition device includes a browser.

23.    (Original) A system as claimed in claim 10, wherein the interpretation includes at least one textual message.

24.    (Original) A system as claimed in claim 10, wherein the acquisition module includes a confirmation module to confirm the integrity of the physiological data.

25.    (Currently Amended) A method of interpreting physiological data, the method comprising:

acquiring physiological data;

interpreting the physiological data based on a predetermined set of criteria such that a separate interpretation is generated, wherein the interpreting step includes:

_____measuring the physiological data;

_____analyzing a set of characteristics associated with the physiological data;

_____checking the integrity of the acquired physiological data by extracting one or more patterns from the physiological data to generate the separate interpretation; and

_____comparing the separate interpretation from the physiological data to a set of known patterns from a library of physiological records;

correlating the separate interpretation to one or more physiological data records in thea library of physiological data records; and

displaying the separate interpretation and the correlated physiological data records on a

display.

26.     (Original) A method as claimed in claim 25, further comprising:
establishing a library of interpreted physiological data records.

27.     (Original) A method as claimed in claim 25, further comprising:
establishing a communications link to an expert location;
transmitting information concerning the interpretation to the expert location; and
displaying a communication from the expert location on the display.

28.     (Original) A method as claimed in claim 27, wherein transmitting information
concerning the interpretation includes transmitting a text message via instant messaging.

29.     (Original) A method as claimed in claim 27, wherein transmitting information
concerning the interpretation includes transmitting a voice message via voice-based instant
messaging.

30. (Canceled)

31.     (Original) A method as claimed in claim 25, further comprising:
creating a library of supplemental materials; and
displaying some of the supplemental materials on the display.